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Completes If Known	
Application Number	09/920,235
Confirmation Number	5852
Filing Date	8/1/2001
First Named Inventor	Mark William Smith
Art Unit	2878
Examiner Name	Constantine Hannaher
Attorney Docket Number	36032/094

U.S. PATENT DOCUMENTS

100-112

FOREIGN PATENT DOCUMENTS

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Date _____

OCT 21 2003

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2

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Examiner Name	Constantine Hannaher
Attorney Docket Number	36032/094

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue numbers, publisher, city and/or country where published.	T 2
CH	3	REICHL, HENRY G., CONNORS, VICKIE S., HOLLAND, ALVIN, HYMES, WARREN D., and WALLIO, ANDREW, "Middle and Upper Tropospheric Carbon Monoxide Mixing Ratios as Measured by a Satellite-Borne Remote Sensor During November 1981, Journal of Geophysical Research, Vol. 91, No. D10, pages 10,665-10,687, September 20, 1986	
CH	4	DRUMMOND, J. R., "Measurements of Pollution in the Troposphere (MOPITT). The Use of EOS for Studies of Atmospheric Physics, pgs. 77-101 (1992)	
	5	MATR MOPITT Airborne Test Radiometer, http://www.eos.ucar.edu/matr/Welcome.html .	
	6	MOPITT, http://www.atmosp.physics.utoronto.ca/MOPITT/home.html	
CH	7	WARNER, JUYING X., GILLE, JOHN C., EDWARDS, DAVID P., ZISKIN, DAN C., SMITH, MARK W., BAILEY, PAUL L., and ROKKE, LAURIE, "Cloud detection and clearing for the Earth Observing System Terra satellite. Measurements of Pollution in the Troposphere (MOPITT) experiment," Applied Optics, Vol. 40, No. 8, March 10, 2001, pgs. 12691284.	
	8	"Gas Correlation Spectroscopy" OPTO-KNOWLEDGE: The Source for Special Imaging - Press, http://www.techexpo.com/WWW/opto-knowledge/gasscor.htm	
	9	SANDSTEN, JONAS, EDNER, HANS, SVANBERG, SUNDE, and WEIBRINK, PETER, "Gas imaging using gas-correlation spectroscopy" http://www.atom.hysik.li.se/DOCS/Prograp978c3.htm	
	10	SMITH, MARK W., "Technical Report for: MOPITT Airborne Test Radiometer (MATR), March 15, 2000, http://www.eos.ucar.edu/Matr/Welcome.html	TECHNOLOGY CENTERS
	11	"Measurements of Pollution in the Troposphere MOPITT," http://www.atmosp.physics.utoronto.ca/MOPITT/home.html	OCT - 5 2003
	12	MOPITT Project, http://eos.acd.ucar.edu/mopitt	
	13	Measurements of Pollution in the Troposphere, MOPITT Overview, http://www.atmosp.physics.utoronto.ca/MOPITT/overview.html	28

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Examiner Name	Constantine Hannaher
Attorney Docket Number	36032/094

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers(s), publisher, city and/or country where published.	T 2
CH	25	LAMARQUE, J., et al., "Assimilation of Measurement of Air Pollution from Space (MAPS) CO in a global three-dimensional model," Journal of Geophysical Research, Vol. 104, No. D21, pages 25,209-26,218, November 20, 1999	
CH	26	PAN, LIWEN, et al., "Retrieval of Tropospheric carbon monoxide for the MOPITT experiment," Journal of Geophysical Research, Vol. 103, No. D24, pgs. 32,277-32,290, December 27, 1998	
CH	27	LEVELT, P. F., et al., "Assimilation of MLS ozone measurements in the global three-dimensional chemistry/transport model ROSE," Geophysical Research Letters, Vol. 25, No. 24, pgs 4493-4496, December 15, 1998	
CH	28	SMITH, MARK W., et al., "The Measurements of Pollutants in the Troposphere (MOPITT) Airborne Test Radiometer (MATTR), The Earth Observer, July/August 1998, Vol. 10 No. 4, http://cesspo.osfc.nasa.gov/eos_observer/8_98/p21.htm	
CH	29	TOLTON, BOYD, T., et al., "Characterization of the length-modulated radiometer," Applied Optics, Vol. 36, No. 26, August 1, 1997, pgs. 5409-5420	
CH	30	SMITH, MARK W., "Method and results for optimizing the MOPITT methane bandpass," Applied Optics, Vol. 36, No. 16, June 20, 1997, pgs. 4285-4291	
CH	31	PAN, LIWEN, et al., "Satellite remote sensing of tropospheric CO and CH4: forward model studies of the MOPITT instrument," Applied Optics, Vol. 34, No. 30, October 20, 1995, pgs. 6976-6988	
CH	32	ANDERSSON, E., et al., "Use of cloud-cleared radiances in three/tour-dimensional variational data assimilation," Q.J.R. Meteorol. Soc. (1994) 120, pgs. 627-653	1994
CH	33	RUSSELL, JAMES M., III, et al., "The Halogen Occultation Experiment," Journal of Geophysical Research, Vol. 98, No. D6, pgs. 10,777-10,797, June 20, 1993	
CH	34	GRASSOTTI, C., et al., "A Study of Satellite Emission computed Tomography," Advances in Remote Sensing Retrieval Methods, RSRM 1987, Deepak Publishing, ISBN 0-8937194-1-1	pp. 23-24
CH	35	DRUMMOND, J. R., "Novel correlation radiometer: the length-modulated radiometer," Applied Optics, Vol. 28, No. 13, July 1, 1989, pgs. 2451-2452	

Examiner Signature	CONSTANTINE HANNAHER	Date Considered	OCT 21 2003
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CH	36	REICHL, HENRY G., et al., "Feasibility of determining the vertical profile of carbon monoxide from a space platform," Applied Optics, Vol. 28, No. 11, June 1, 1989, pgs. 2104-2110	
	37	WYATT, C. L., "Radiometric System Design, Chapter 5 The Radiometric Performance Equation," MacMillan Publishing, pgs. 109-113	
CH	38	LORENC, A. C., "Analysis methods for numerical weather prediction," Quart. J. R. Met. Soc. (1986), 112 pgs. 1177-1194	
CH	39	FLEMING, HENRY E., "Temperature Retrievals via Satellite Tomography," Advances in Remote Sensing Retrieval Methods, A. Deepak, 1985, ISBN 0-937194-07-7	pp. 55 - 69
CH	40	FLEMING, HENRY E., "Satellite Remote Sensing by the Technique of Computed Tomography," Journal of Applied Meteorology, Vol. 21, October 1982, pgs. 1538-1549	
CH	41	SMITH, W. L., "The Use of Interferometric Radiance Measurements for Sounding the Atmosphere," Journal of the Atmospheric Sciences, Vol. 36, April 1979, pgs. 566-575	
CH	42	LUDWIG, C. B., "Measurement of Air Pollutants from Satellites. 1: Feasibility Considerations," Applied Optics, Vol. 13, No. 6, June 1974, pgs. 1494-1509	
CH	43	BURCH, D. E., et al., "Instrument to Monitor CH4, CO, and CO2 in Auto Exhaust," October 1973, Philco-Ford Corp. prepared for Environmental Protection Agency, EPA-650/2-73-020 PB-226 438	
CH	44	ELLIS, P., et al., "Remote sounding of atmospheric temperature from satellites IV. The selective chopper radiometer for Nimbus 5," Proc. R. Soc. Lond. A. 334, August 28, 1973, pgs. 149-170	
CH	45	TAYLOR, F. W., et al., "Radiometer for Remote Sounding of the Upper Atmosphere," Applied Optics, Vol. 11, No. 1, January 1972, pgs. 135-141	
CH	46	HOUGHTON, J. T., et al., "Remote sounding of atmospheric temperature from satellites," Proc. Roy. Soc. Lond. A. 320, pgs. 23-33 (1970)	

Examiner Signature	CONSTANTINE HANNAHER	Date Considered	OCT 21 2003
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